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PRELIMINARY RESULTS OF RECONSTRUCTIVE PLASTIC SURGERY OF ORAL CANCER WITH THE USE OF CUTANEOUS FASCIAL SURGERY FOR ORAL CANCER.OH LUCHEVOH FLAP BUT FROM THE FOREARM USING MICROSURGICAL TECHNIQUES

Jumaev A., Dustov Sh. Kh.

Bukhara Regional branch of the Republican From the pecialized Hscientific harmaceutical Center Aboutncology and Radiology

Abstract: Objective: to improve the functional results of microsurgical tongue reconstruction after radical oncological operations.

Material and methods: In the Department of Head Neck and reconstructive Surgery of the Bukhara regional branch of the Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology, in the period 2018-20-2021 years, surgical treatment of 11 patients with tongue cancer was performed with skin-fascial radio therapy from the forearm using microsurgical techniques. У восьми больных с диагнозом рак боковой поверхности языка выявлена T 1-2 N 0-1 M 0 stages were detected in eight patients diagnosed with cancer of the lateral surface of the tongue1-2N0-1M0, and TT 3N1-2-2M0 stages were detected in three patients. All patients underwent surgical treatment in the following volumes: hemiglosectomy, cervical clymphodisection, and microsurgical tongue plastic surgery with reinnervatedskin-fascial radiation flap from the forearm. Three patientsы with the diagnosis T1N0M0 microsurgical plastic surgery were performed initially, and in other cases, 2-4 courses of polychemo therapy were performed at the first stage according to the scheme: Cisplatin 75 mg / m2, fluorouracil 750 mg / m2 or chemo radio therapy and after partial regression of the tumor in the second stage, surgical treatment and restoration of the tongue were performed.

Results: The follow-up period ranged from 2 to 22 months. The overall survival rate of the flap was 82%. In three cases, flap necrosis was detected in the postoperative period. Two patients were found to have arterial thrombosis of the microvascular anastomosis of the connective tissue, and the flap was removed. The average healing time for the donor area of the forearm was 4 weeks.

Conclusion: Our experience shows that microsurgical tongue reconstruction is a good reconstructive option for patients and improves the functional qualities of patients after surgery in terms of speech, chewing and swallowing.

Keywords: tongue cancer, glossectomy, reconstruction, oral cavity tumors, skin-fascial flap.

Introduction. Oral mucosal cancers are the 6th most common cancer in the world, accounting for about 30 % of head and neck tumors [13]. Despite the fact that these neoplasms belong to visual localization tumors, detectability in the early stages remains at a low level. Up to 65.4 % of patients are admitted to specialized institutions with a locally advanced process, which leads to high mortality in the first year after diagnosis [14]. According to statistics from the American Cancer Society (American Cancer Society). According toancer 'ssociety, tongue cancer (OC), is twice as common in men, which may be due to their higher susceptibility to predisposing factors such as smoking and alcohol [11,14,16], which are closely associated with the development of OC. Most often, OC is diagnosed in patients aged 60-64 years. In this group of patients, the risk of developing cancer

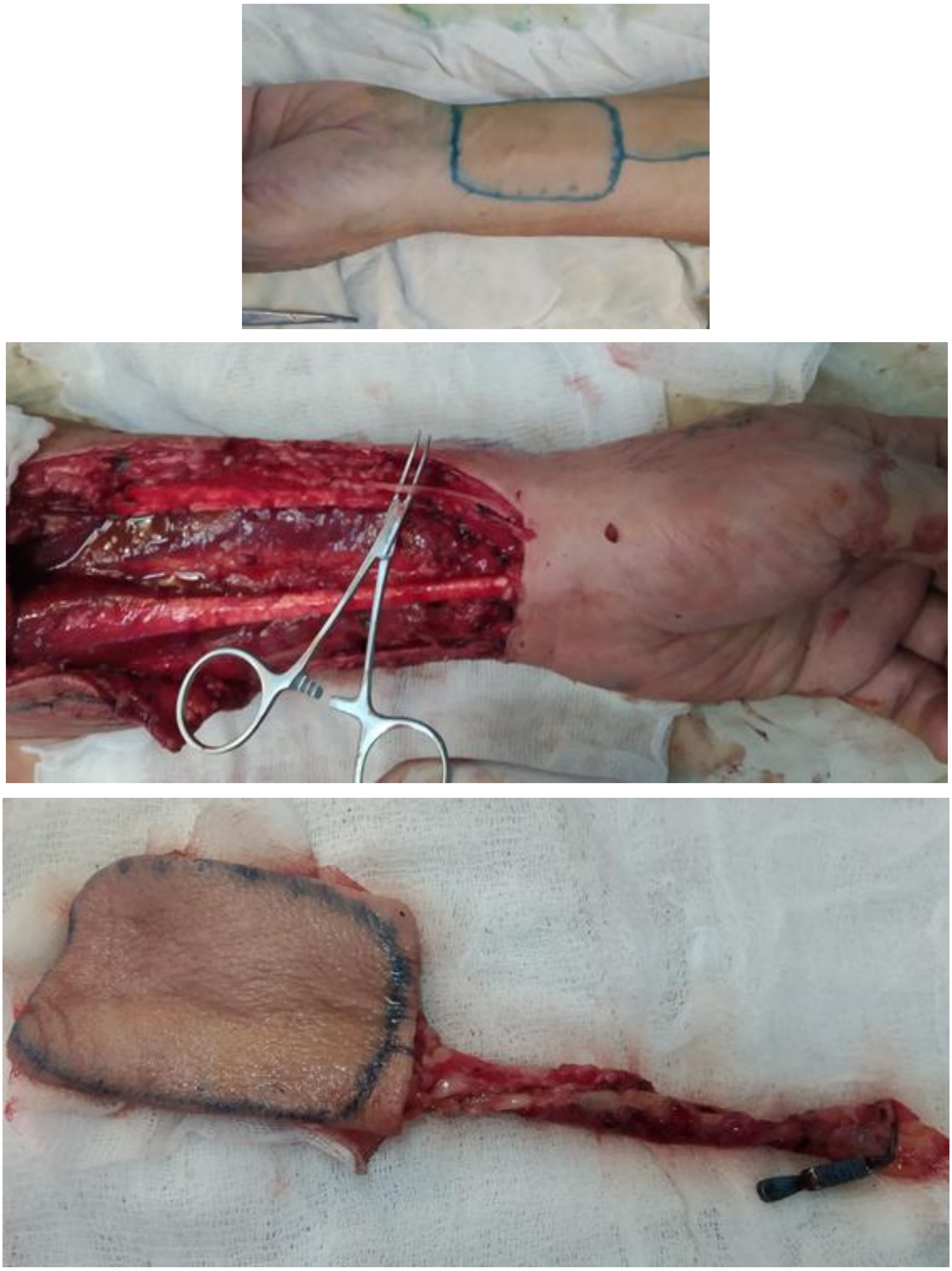
increases, according to various sources, from 6 to 15 times. Contamination with oncogenic types of human papillomavirus (HPV) is also an important risk factor for OC) (16, 18, 31, 33, 35, 39, 45, 52). A number of studies have shown that HPV-positive status, is a prognostic factor that determines overall survival, disease-free survival, and can also be a prognostic marker, that suggests a tumor response to treatment. The main methods of treatment of patients-with locally advanced cancer of the oral cavity and tongue are surgical intervention, chemoradio therapy and targeted therapy, and the key stage is radical surgery [22, 23]. This type of surgery involves removing the tumor within several anatomical areas. This is inevitably associated with the loss of the necessary functions of the body: chewing, swallowing, and speaking. It should also be noted that performing operations of this volume is inevitably associated with the formation of extensive defects in the oral cavity and tongue. The use of a tracheostomy tube for breathing and a nasogastric tube for feeding, constant salivation and the need to wear complex bandages, significantly limit the social rehabilitation of these patients, and in some cases make it impossible [24]. Therefore, in order to improve the quality of life of patients with tongue cancer, a one-step reconstruction of their defects comes to the fore. The choice of an autograftto replace large oral defects, primarily depends on the volume of the defect. To date, for tongue reconstruction, there are many ways of various plastic surgery options, replacing defects with the use of free microvascular flaps. The almost standard method is visceral, cutaneous-fascial, and musculocutaneous free flap reconstruction [25]. In recent decades чаще всего применяются , revascularized skin-fascial flaps (radial and anterolateral femoral) are most often used, which are used to replace medium and large defects in the oral cavity with good functional results [15,1-7]. However, their application has its own peculiarities. Certain surgical procedures are required. skills, technical support, with this type of surgical plastic surgery, the duration of the operation increases compared to the use of regional flaps, and when the radiation flap is taken, pronounced cosmetic defects are formed in the donor zone [1-6]. After subtotal and total glossectomy , a reinnervated radial flap is often used [6], which is a thin, elastic, plastic material with a long vascular pedicle, which greatly facilitates the work of surgeons, and also has sufficient volume to replace extensive defects. A musculocutaneous-thoracodorsal flap, including the latissimus dorsimuscle, with thoracodorsalvessels and a nerve, is used for tongue reconstruction after total glossectomy [7]. Reinnervation of the motor thoracodorsal nerve allows for muscle contractility of the autograft during tongue restoration.

Materials and methods: In the Department of Head Neck Tumors and Reconstructive Surgery of the Bukhara regional branch of the Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology, in the period 2018-2021, 11 patients with tongue cancer were surgically treated with a skin-fascial radiation flap from the forearm using microsurgical techniques. T1-2N0-1M0 stages were detected in eight patients diagnosed with cancer of the lateral surface of the tongue, and T3N1-2M0 stages were detected in three patients. All patients underwent surgical treatment in the volume of hemiglosectomy, cervical lymph dissection and microsurgical tongue plastic surgery with reinnervated skin-fascial radiation flap from the forearm. Three patients with a diagnosis of T1N0M0 microsurgical plastic surgery was performed initially, and in the remaining cases, 2-4 courses of polychemotherapy were performed at the first stage according to the scheme: Cisplatin 75 mg/m2, fluorouracil 750 mg/m2 or chemoradio therapy, and after partial tumor regression at the second stage, surgical treatment and restoration of the tongue were performed.

Table 1. Analysis of clinical data of tongue cancer patients undergoing microsurgical reconstruction.

	Indicators	Number of patients
Age	group ≤50	5 (45%)
	≥50	6 (55%)
Paul	Male	7 (64%)
	Female	4 (36%)
Localization of the tumor	Right side surface	7 (64%)
	Left side surface	3 (27%)
	Tip of the tongue	1 (9%)

"T" classification	T1-2	8 (73%)
	T3	3 (27%)
Treatment:	Surgical Treatment only	3 (27%)
	Chemotherapy/Radiotherapy + Operation	8 (73%)



Rice.1a Stage selection of reinnervated skin-fascial radial flap from the forearm.



Figure 1b View after surgery hemiglosectomy with simultaneous plasticsurgery, using reinnervated skin-fascial radial flap from the forearm.

After treatment of the surgical field, an incision of the skin and subcutaneous adipose tissue with a length of 3 cm was made between the tendons of the ulnar flexor of the wrist and the superficial flexor of the fingers, extending 3 cm above the distal skin fold of the wrist. In a blunt and acute way, the ulnar vascular bundle was isolated and taken on a holder. The ulnar nerve was identified, isolated, and placed on a holder. Further, an incision in the projection of the ulnar sulcus between the ulnar flexor of the wrist and the superficial flexor of the fingers was made 10 cm from the incision in the proximal direction. The vascular bundle was isolated in a blunt and acute way, passed between the ulnar flexor of the wrist and the superficial flexor of the fingers. In the lower third of the forearm, a figured skin area, measuring 7 by 5 cm, is cut out with a fringing incision. The vascular pedicle was 12 cm long (Figure 1a). The fascia is detached from the tendon of the ulnar flexor of the wrist, the tendon of the muscle – the superficial flexor of the fingers, the tendon of the long palmar muscle, and the tendon of the radial flexor of the fingers. The saphenous vein of the forearm is included in the flap. Ligation of the vascular bundle was performed in the distal and proximal parts. The flap is cut off. The ulnar nerve is wrapped around the underlying muscles, the wound surface is formed, which is closed by a split skin autograft from the hip. The edges of the wounds are matched, stitched in layers. Hemostasis along the way. Aseptic dressing.

Moving the flap to the recipient area and the microsurgical stage of the operation. The cutaneous fascial autograft of the medial surface of the right forearm is placed in the area of the defect. The vascular pedicle was passed through the tunnel to the recipient vessels. The flap is fixed to the edges of the tongue defect with Vicryl 4-0 nodal sutures. Using microsurgical techniques and optical magnification, anastomosis was performed. End-to-end microanastomosis was performed between the superior thyroid and radial arteries, between the facial and radial veins, and betweenthe external cutaneous nerve of the forearm and the superficial cervicalnerves.

Results. The follow - up period ranged from 2 to 22 months. The overall survival rate of the flap was8.2%. In three cases, flap necrosis was detected in the postoperative period. Two patients were found to have arterial thrombosis of the microvascular anastomosis of the connection after one day of surgery, and the flap was removed. The average healing time for the donor area of the forearm was 4 weeks, назогастральныйthe nasogastric tube was removed, and the patients were transferred to a natural diet, liquid food. The average healing time, for the donor area of the forearm was 4 weeks.

Discussion.ВCurrently, it is generally accepted that freeая пересадка tissue transplantation with microvascular anastomosis is the preferred method of reconstruction after head and neck cancer surgery (8). For the reconstruction of tongue cancer, we used the skin-fascial radial flap because of several advantages of this flap. For example, a flap has a superficial location: it is anatomically constant, has a long vascular pedicle, a thick diameter, and can be easily isolated(9).

Using a forearm radiation flap.

Advantages	Disadvantages
Possibility of simultaneous operation of two surgical teams	It is never taken in the osteocutaneous variant due to the high risk of fracture in the radius
Thin flap, plastic forming is possible	The donor area of the forearm requires free plastic surgery to close the wound
Relative simplicity of flap fence	The skin is different in color from the skin of the face
It is possible torestore the sensitive skin of the flap by anastomosing the external nerve of the forearm skin with the sensitive nerves of the recipient area	After taking the flap, there is a loss of sensitivity over the area of the "anatomical snuffbox"
Relatively large diameter of feeding vessels	-

This method is widely used for patients requiring simultaneous removal of defects after surgery on the oral cavity. Since the oral cavity is responsible for many different functions, such as chewing food, swallowing, saliva production, speech and breathing, functional deficits lead to obvious changes in the quality of life of patients (10). Waiting for the clinical outcome of reconstruction after oral cancer surgery is considered an important factor [11].

Conclusion. Our experience shows that microsurgical tongue reconstruction, is a good reconstructive option, for patients and improves the functional кquality of life of patients after surgery in terms of speech, chewing and swallowing.It creates favorable conditions, for medical, labor, and social rehabilitation of a complex group of patients with oral tumors.

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